Red Cliff Band of Lake Superior Chippewa
August 2016

ENVIRONMENTAL PROTECTION AGENCY (EPA)
Grant Application

Announcement: EPA-OAR-OTAQ-16-02
Clean Diesel Fishing Fleet Project FY 2016 - 2018

Project Title: Red Cliff Sustainable Fishing Fleet: Clean Diesel Project

Applicant Information

Applicant: Red Cliff Band of Lake Superior Chippewa

Address: [redacted]

Eligible Entity: The Red Cliff Band of Lake Superior Chippewa Indians is a federally recognized Indian Tribe, organized under a Constitution adopted August 25, 1938, and approved on November 9, 1938 pursuant to Section 16 of the Indian Reorganization Act and amended according to the provisions of applicable federal law on February 15, 1991.

Total Project Cost: $654,356
EPA Funds Requested: $491,000
Mandatory Match: $163,356

The 25 % mandatory match includes cost-share payments in the amount of $2,000 each by the 5 commercial fishermen committed to this project.

Target fleet: The target fleet consists of six Red Cliff tribal member commercial fishing vessels with six aging diesel engines. These vessels are under the jurisdiction of the Red Cliff Fishing Committee through the Treaty Natural Resources Division. Owners are required to have Tribal Membership Fishing I.D. cards. In addition, under Tribal law, they must submit to all tribal fishing regulations that are resultant from intertribal, state, regional, national and international negotiations. Five vessels are owned by individual fishing business/boat owners and one is owned by the Tribe. The vessel owned by the Tribe is primarily used for fisheries research.

Technology: Marine Diesel Engine Repower
Marine engines owned by project participants operate more than 1000 hours per year.

Short Project Description: Certified Engine Repower of 6 marine diesel engines used by tribal commercial fishing boats. Reduce emissions by upgrading from Unregulated - Tier 2 to Engine Repower Tier 3 – 4 diesel engines.

Section 1 Project Summary and Overall Approach

A. VEHICLES AND TECHNOLOGIES

The project will complete 6 marine engine repowers to 5 of the 14 independently owned big boats of the Red Cliff commercial fishing fleet and 1 tribally owned big boat used primarily for research purposes. A big boat is defined under RCCL Chapter 7 as, "…a Coast Guard documented vessel with a weight of five or more tons equipped with a

powered net lifter." Treaty rights guarantee the Tribe an annual portion of the safe harvest quota for 6 management units in Lake Superior, and the Tribe licenses eligible individuals to harvest the tribal quota.

Because of the age of the 6 diesel engines participating in the project (average engine age is 45 years), the decision was to perform a repower of the propulsion systems to achieve emissions reductions. Repower will be from Unregulated to Tier 3-4 diesel engines. Hiring a marine engineer to assess the propulsion systems and create a bid packet with recommended Tier 3-4 diesel engines is a component of the project, therefore the exact engine replacement information is not known at this time. We entered the same horsepower for the theoretical new engine in the EPA DEQ calculator to derive our emission reduction calculations.

The 6 engines purchased for this project will be retained by the individual fishermen (5) and tribal program (1) that own the fishing tugs. These tugs remain in the community for generations, passed from father to son. The tribal government boat is operated by the Fisheries Department whose need for a research boat is ongoing and indefinite. Red Cliff is the poorest Tribe in Wisconsin and is one of the most impoverished reservations in the nation. Due to economic conditions, a "Normal Attrition Schedule" does not apply to the tribal members that fish for a livelihood. Some of our fishermen struggled to provide even basic information for their diesel engine (i.e. model, year, displacement), and when there is a mechanical issue, a part is replaced with, "whatever fits." It is a testament to the ingenuity and problem-solving ability of Red Cliff fishermen that these antiquated and unregulated engines continue to power the Tribe's commercial fishing industry.

Scrapping procedures will be to punch a hole in the block of the engine being removed. It will include photos of the engine being removed, and the removed engine after it is decommissioned.

B. ROLES AND RESPONSIBILITIES*:* ***See Chart below*.**
The following chart shows the roles and responsibilities of key staff, a project engineer, tribal fishermen and contractors involved in completing this project.

C. TIMELINE AND MILESTONES: ***See Chart below*.**
The following chart also shows the time line for completion of this project.

Item or Activity	**Roles and Responsibilities**	**Timeline and Milestones**
Mobilization and staging. Including budget development, development of final job description for the Red Cliff Clean Diesel Project Coordinator, advertisement, interviews, and selection. Office and work station set up.	Treaty Natural Resources Division (TNR) Administrator and Human Resources	January-February 2017 with completion by no later than **February 28, 2017.**
Cost-share. Receive payment of cost-share from participating fishermen within 60 days of notification of award.	Vessel Owners, TNR Division Administrator and Red Cliff Accounting Office	January-February 2017 with completion by no later than **February 28, 2017.**
Coordinator Responsibilities Reporting requirements to EPA, oversight of contractors, budget management, boat owner liaison, maintains project guidelines using Diesel Emission Quantifier (DEQ). Submits Work Plan to EPA.	Clean Diesel Project Coordinator	Position begins March 1-10, 2017. Responsibilities are ongoing throughout the duration of the project. Completion of project by no later than **December 31, 2018.**
Seek bid requests for marine engineer services. Invite marine engineers to pre-bid meeting. Set bid deadline and select winning bid. Develop contract and sign.	Clean Diesel Project Coordinator	March 2017 with selection by no later than **May 1, 2017.**

Conduct vessel inspections/surveys. Marine engineer to visit fishing tugs, review power system and determines a compatible Tier 3 engine for each boat. **Result** Marine engineer submits a report and complete bid packet with repower specifications for each boat. **Review** Report and bid packet ready for marinas and boat yards.	Marine Engineer, Vessel owners, Clean Diesel Project Coordinator Marine Engineer Clean Diesel Project Coordinator TNR Division Administrator	May - June 2017 with completion no later than **June 30, 2017.** Completion no later than **July 31, 2017.** Completion no later than **August 15, 2017**
Solicit Bids. Tribe uses bid packet to put out bid requests to boat yards/marinas certified to replace marine engines. Advertise per EPA and Tribal policies and procedures. **Receive bid requests and select preferred vendor.** **Contract with boat yard/marina** for replacement and install of diesel engines. Create a clear schedule of boat installs and timeline for completion. Contract review and finalization.	Clean Diesel Project Coordinator Clean Diesel Project Coordinator Property and Procurement Office Clean Diesel Project Coordinator TNR Division Administrator Red Cliff Legal	**September 2017** **October 2017** **November 2017**
Off-site dry dock and Repower of vessels begins. Follow a schedule to Repower boats coordinating dates with vessel owners and the installation contractor. Ensure clear communication between all parties involved to ensure timely completion of the project.	Vessel owners Marine Diesel Repower Contractor (marina or boat yard) Marine Engineer Clean Diesel Project Coordinator	The optimal time for repower will be after the herring season (**Nov 30**). It is expected some boats will not return to the water until **June 30, 2018**.
Operational tests and adjustments.	Vessel owners and Marine Diesel Repower Contractor	Completion no later than **Sept 30, 2018**
Project completion and close out Final report preparation and submission	Clean Diesel Project Coordinator	Final Report submitted no later than **December 14, 2018.**

Section 2 Project Location

A. PROJECT LOCATION

The fishing area of Red Cliff commercial fishing boats/engine operations are waters along the south shore of Lake Superior in Wisconsin and Michigan. Treaty harvest area includes Lake Superior Management Units WI1, WI2, MI2, MI3, MI4 and MI5. The percentage of time spent fishing in each state is:

Wisconsin: Bayfield (Red Cliff location), Douglas, and Ashland County shoreline 88%
Michigan: Gogebic, Ontonagon, Houghton, and Keweenaw County shoreline 12%

The Red Cliff Band of Lake Superior Chippewa Reservation shoreline extends 22 miles on the Bayfield peninsula, at the northern-most point of Wisconsin. The Project Area extends several miles out into Lake Superior and includes the Apostle Islands National Lakeshore. One commercial tug resides almost entirely in MI waters of Lake Superior, and the tribal (research) vessel completes routine assessments in MI waters as well.

B. AREAS OF POOR AIR QUALITY

The project is not located in an area identified for poor air quality.

C. AREAS THAT RECEIVE A DISPROPORTIONATE QUANITY OF AIR POLLUTION FROM DIESEL FLEETS

The project is not located in an area identified as having disproportionate quantity of air pollution from diesel fleet.

Section 3 Benefits to the Community

Clean diesel will enable our local fishermen to do their part in helping to create an environmentally sustainable community. From an economic standpoint, granting these funds will allow those otherwise unable to afford new engines a way of securing them. It provides not only cleaner air and more efficient engines; it preserves a means of earning a living that is an integral part of this community. It will have far reaching economic benefits and aid in providing a sustainable food source for the tribe.

The Red Cliff Band of Lake Superior Chippewa's has historically relied heavily upon its fishery resources on reservation, in the ceded territory, and in Lake Superior for subsistence. The value of the fishery today not only includes the importance of the fishery from an economic and sustenance perspective. The fishery holistically involves recreational, cultural, and traditional values as well. Currently, Red Cliff protects and develops its fishery resources by monitoring and managing populations, restoring depleted populations of native species, and enhancing fish habitat.

While the Tribe is rich in natural resources, it is conversely challenged with minimal financial resources. Red Cliff is often referred to as the smallest and poorest tribe in Wisconsin. Located in Bayfield County, Wisconsin, the reservation is home to 2,174 residents[1], 1,266 of who are enrolled tribal members[2]. According to 2010 Census data, 40% of Red Cliff residents live below the poverty line, exceeding the national statistics for AIAN population at 28.4%[3]. In 2007, Bayfield County was deemed one of the 200 poorest counties in the nation.

Tribal Health Risk Factors

A 2015 Red Cliff Community Health Assessment funded by the Centers for Disease Control and Prevention (CDC) with analysis conducted by the Great Lakes Inter-Tribal Epidemiology Center (GLITEC) measured behavioral risk factors for residents of Red Cliff (86.5% of respondents). Nearly 26% of the participants indicated they had been diagnosed with asthma. Another 5.5% had been diagnosed with chronic obstructive pulmonary disease, emphysema or chronic bronchitis. 34.2 % of N=107 Parents reported their children had been diagnosed with asthma. 78.6% of those reported the children still have asthma.

Of the adults that took the survey N=307, 28.7% had been fishing in the past 12 months. Fishing done by one or more family members to provide food indicates a high percentage of families use local fish as an integral protein food source. These two factors, the high incidence of pulmonary related health issues and the high amount of fish consumed from the lake, highlight the importance of clean air and water to the Red Cliff people.

Clean Diesel

The Red Cliff Band of Lake Superior Chippewa believe that in helping to create a cleaner commercial fishing fleet this will benefit the sustainability of the tribe and greatly reduce any negative environmental and health impacts.

Diesel is one of the largest contributors to environmental pollution problems worldwide, and will remain so, with large increases expected in vehicle population and vehicle miles traveled (VMT) causing ever-increasing global emissions. Diesel emissions contribute to the development of cancer; cardiovascular and respiratory health effects; pollution of air, water, and soil; soiling; reductions in visibility; and global climate change. Where instituted, control programs have been effective in reducing diesel fleet emissions. Fuel changes, such as reduced sulfur and aromatics content, have resulted in immediate improvements across the entire diesel on and off-road fleets, and promise more improvements with future control. By doing their part repowering their diesel engines, the Red Cliff fishermen can be a part of this world-wide initiative to lower pollution levels.

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[1] U.S. Census, 2010

[2] U.S. Census , 2010

[3] 2010 American Community Survey for the American Indian and Alaska Native alone population http://factfinder2.census.gov

Section 4 Partnerships

Micro Level Partnerships

The primary partner for the Clean Diesel Project is the Red Cliff Fish Committee. Over several months, meetings were held with the Red Cliff TNR Administrator and local fishermen to determine their interest in the engine repower proposal. Due to their strong interest and willingness to invest, it was decided to proceed with the application. Tribal members understand the integral part clean air quality plays to the environment and maintaining the Native way of life.

Locally, the Tribe is a member of the Chequamegon Bay Area Partnership (CBAP), which includes many local agencies that collaborate on projects and local issues for consideration in management planning.

Mid-Level Working Partnerships

On a more formal partnership basis, Red Cliff is known for proactive support of the ecological management of tribal lands and waters including Lake Superior; the preservation of quality Native fishing; fishery development; and monitoring environmental impact related to tribal air, land and waters.

Red Cliff was a member agency for the preparation of the Lake Superior Lakewide Action and Management Plan (LAMP) 2008. This involved the development of a cooperative eco management plan for Lake Superior. The Tribe continues to work as a member of this group to implement the recommendations of the plan. Those goals specific to clean diesel emissions are the following:

> From Chapter 3: Ecosystem Goals, Indicators and Monitoring Red Cliff has committed to:
> LAMP Strategic Outcome #7: Human activities in the Lake Superior basin mitigate the contribution of greenhouse gases to the environment. Ongoing climate change adaptive management strategies are pursued in the Lake Superior basin.
>
> Goal 4: Make Lake Superior a net carbon reduction area that reduces greenhouse gas emissions. Facilitate basin collaboration on activities to reduce carbon emissions.
>
> LAMP Strategic Outcome #10: Air and water quality are restored and protected and soils are conserved.
>
> Goal 2: Eliminate contaminants at levels that impact plants and animals, including humans.

In addition, The Tribe is currently an active member of the EPA Lake Superior Partnership, with technical staff serving on the Lake Superior Partnership Working Group and the Mining Subcommittee as well as the Communications and Outreach Subcommittee. Other partners in the Lake Superior Partnership include agencies such as: the US EPA, Environment and Climate Change Canada (ECCC), USGS, MN and WI DNR, MI DEQ, MPCA, US Fish and Wildlife Service, Forest Service, KBIC, Bad River Tribe, Fond du Lac Tribe, National Park Service, NOAA, GLIFWC, Lakehead University, Ontario Ministry of Natural Resources, 1854 Treaty Authority, Grand Portage Band, among others. This is a clear example of Red Cliff's dedication to cooperative strategic energy planning and sharing of technical assistance.

Tribal Government Partnership

The Red Cliff Band of Lake Superior Chippewa Tribal Government has given continued support for initiatives that increase energy efficiency. This supports increasing the energy efficiency of the tribal commercial fishermen's diesel engines. The Red Cliff Band of Lake Superior Chippewa Tribal Council has approved many Resolutions that support strategic energy planning. Examples include:

> Tribal Resolution 12-01-08B Energy Independence Resolution
> Increase and promote public awareness regarding the benefits of increased energy conservation, energy efficiency, and renewable energy use. These benefits include and are not exclusive to: clean air and water. Investigate renewable energy resources and seek partnerships with local units of government in the furtherance of the State of Wisconsin's effort to achieve the "25 x 25" goal and for an Energy Independent Community.
>
> Tribal Resolution No. 5-04-09B Renewable Energy Resolution

The Red Cliff Band of Lake Superior Chippewa strongly supports the development, implementation and promotion of Renewable Energy and reflects so by enactment of, Submission of the DOE-Energy Efficiency and Conservation Block Grant.

Macro Level Partnerships

As interpreted by the Federal courts, the treaty right of taking fish guarantees to the Tribe not just the right to harvest fish but the right to manage environmental and marine resources consistent with sound conservation principles and the right to protect and preserve the marine environment. At the same time, the treaty right imposes a trust responsibility on the Federal government to consult with the Tribe and assist in the protection of the Tribe's treaty resources and management rights. The Tribe's involvement in environmental management forums and marine resource protection initiatives demonstrates the central importance of marine resources to the Tribe and its commitment to environmental conservation and protection. The Tribe looks to the Federal Government as a partner and trustee to preserve and protect these resources and the Tribe's ability to harvest them sustainably for generations to come.

Section 5 Project Sustainability

Project Sustainability: A History of Commitment

The Red Cliff Tribal members have been stewards of Lake Superior for generations. The lake is foundational to Ojibwe cultural identity. It follows that the Tribe has been an integral part of creating and implementing broad based environmental protection plans for Lake Superior for many years. They have been sought out by other organizations to contribute their input for comprehensive and inclusive input. They have worked cooperatively with many other organizations for the protection of their air, land and water and intend to continue to do so for generations to come.

Current Commitments to Environmental Sustainability on the Reservation

The Red Cliff Tribe Environmental Department exists to protect the quality of the water, land and natural resources of the Red Cliff Tribe. It is dedicated to long term remediation and restoration of the waters of Lake Superior in cooperation with an array of outside agencies. One recent project funded by the EPA General Assistance Fund was a documentary film titled: Dazhindandaa I'iw Nibi (Let's Talk about the Water). Produced in 2016, this film interviews different tribal elders, youth, community members, Tribal Government, Fish Hatchery and Water Resources program staff about the importance of Lake Superior to the tribe. It is evident that having clean air and water is requisite to preserving the indigenous Ojibwe culture at Red Cliff. This educational piece is used to teach about the symbiotic relationship the Red Cliff people have with the land and water. It promotes Great lakes-based ecosystem education and stewardship.

Projects related to these outcome objectives include: Lake Superior Barrels Project, riparian buffer restoration and water quality monitoring; pet waste stations, hazardous waste disposal events, annual spring clean-up, reseeding of the wild rice stands, clean-up of beaches and areas surrounding water bodies, annual Watershed Symposium, Mining Summit, environmental outreach and education, workshops, and coordination with a variety of programs within the Tribe to promote a clean environment.

As evidenced by these programs The Red Cliff Tribe of Lake Superior Chippewa is fundamentally dedicated to restoring and maintaining a healthy natural environment for generations to come.

Future Commitment to Environmental Sustainability

Resolution 4.4.16B: To ensure a code of laws that will effectively protect the Tribe's natural resources (2016)

Cognizance of the need for improved environmental laws compelled the Red Cliff Compliance Review Team, (comprised of staff from the Treaty Natural Resource Division, Legal Department, Planning Department and Tribal Historic Preservation Office) to hold an all-day retreat in October of 2015. The purpose was to review the current permit process and Tribal Code of Laws. Established via the Land Use Ordinance (Chapter 37) of the Red Cliff Code of Laws, the PAC Team is our circle-of-care for the environment, providing the policies and procedures necessary for comprehensive land use management on the Reservation. They also review all land use projects which have the

potential to affect tribal land or resources use.[4] The PAC Team determined that the codes should be quantifiably based for improved decision making, and support community values that reflect cultural traditions. For example, clean water is important to the Tribe, yet there is no ordinance on storm water management.
As a result the PAC Team has identified numerous codes that are:
a) inadequately written to protect the resource; b) outdated; c) do not reflect cultural natural resource values; d) not integrated with other pertinent code; and e) not designed to be conducive for efficient permitting workflow processes. The PAC Team has also identified the permit application process itself as needing an overhaul due to a cumbersome and complicated approval process that results in confusion and a lengthy review period. Additionally, Red Cliff lacks a clear enforcement policy and process to ensure adherence to laws. The outcome of the Red Cliff Compliance Review Teams efforts was a grant proposal submitted in April of 2016 to the Administration for Children and Families (ANA) for Environmental Regulatory Enhancement.

Taking the crucial step of self-examination and making a plan to implement change in the form of laws to protect tribal natural resources is a strong indicator of a commitment to environmental sustainability. As part of this project the team will be looking at additional ways to decrease air pollutants, including diesel engine exhaust. This project has been endorsed by the Great Lakes Indian Fish & Wildlife Commission whose letter of support guarantees they will provide technical assistance in the development of new Environmental Regulatory Codes.

Market and Resource Summary for Red Cliff Band of Lake Superior Chippewa
In 2015, numerous tribal programs worked collaboratively with the US Department of Energy – Office of Indian Energy to produce "Market and Resource Summary for Red Cliff Band of Lake Superior Chippewa." This document was developed to assist the Tribe in addressing energy efficiency upgrades and developing renewable energy resources on the reservation.

EPA Building Blocks for a Sustainable Community
Also in 2015, tribal programs worked collaboratively with EPA through an effort led by the TNR Division's Environmental Department to create "Building Blocks for a Sustainable Community," a document specific to Red Cliff's efforts towards improved sustainability. The involvement of EPA was a competitive proposal driven process to EPA in which Red Cliff was selected to participate.

Proof of Sustainability
All of the efforts listed above are examples of Red Cliff's dedication to using education, evaluation and regulation as means to protect the environmental quality of their tribal natural resources. The fact that Red Cliff fishermen are also making a financial commitment to the project proves their buy-in to sustainable air quality standards.

Section 6 Environmental Results—Outputs, Outcomes and Performance Measures

Linkage to EPA Strategic Plan
Boats which are Repowered with new diesel engines will support progress towards EPA's 2014-2018 Strategic Plan Goal 1, 'Addressing Climate Change and Improving Air Quality,' Objective 1.2, 'Improve Air Quality,' which states, "Achieve and maintain health and welfare-based air pollution standards and reduce risk from toxic air pollutants and indoor air contaminants." The Repowering of six diesel fishing fleet engines will reduce emissions, thereby reducing local and regional air pollution of criteria pollutants, air toxics, and greenhouse gases. (Specific pollutants are listed in the chart below.

Item/Activity	Outputs	Outcomes
Mobilization and staging. Including budget development, development of job description for Project Coordinator, advertisement,	Job description, human resources/personnel interview, selection, and hiring documentation. Periodic and final performance	Red Cliff staff and partners have increased capacity to implement this project.

[4] Red Cliff Band of Lake Superior Chippewa. Red Cliff Tribal Code, Chapter 37, Appendix 1.

interviews, and selection.	reports.	
Red Cliff Project Coordinator orientation and training.	90 day employee evaluation. Periodic and final performance reports.	Red Cliff staff and partners have increased capacity to implement this project.
Development of the RFQ, Advertisement for Bids for consulting engineer and contracting services, posting, and consultant contractor selection/contract. Including qualified marine engineer and marine diesel engine repower contractors. Advertise per EPA and Tribal policies and regulation. Contract development and sign.	Request for qualifications, advertisement for bid/posting documentation, proposal and bid comparison documents and contract documents. Periodic and final performance reports.	Red Cliff staff and partners have increased capacity to implement this project.
Conduct marine boat/diesel engine inspections to determine engine repower specifics.	Marine survey reports on the six boats. Contractor invoice for service fees, periodic and final performance reports.	Confirmation of vessel engine replacement eligibility to proceed with expenditures, engine repowering.
Off -site dry dock and retro fit of vehicles. Including coordination between vessel owners and contractor, meetings, and facilitate replacements.	Contractor, supplier invoices, confirmation of engine recycle/dismantle, photos, periodic and final performance reports.	Retrofitted vessels with engine replacements (repower) , reduction in diesel emissions in all categories as shown in emissions reduction chart. Human and environmental health related benefits.
Operational tests and adjustments	Fishing business/vessel owner reports, contractor documentation, periodic and final performance reports.	Maximum engine performance and final acceptance of work.
Project close out and final reports	Final performance report.	Project completion.

Environmental Outputs Chart: Current and after Repower (also see attachments)

Technology Type		Annual Emissions (per EPA/DEQ) for Nitrogen Oxides NOX (tpy) current	Annual Emissions (per EPA/DEQ) for NOX (tpy) w/retrofit	Annual Emissions (per EPA/DEQ) for Particulate Matter PM2.5 (tpy) current	Annual Emissions (per EPA/DEQ) for PM2.5 (tpy w/retrofit	Annual Emissions (per EPA/DEQ) for Hydro Carbons HC (tpy) current	Annual Emissions (per EPA/DEQ) for HC (tpy) w/retrofit	Annual Emissions (per EPA/DEQ) for Carbon Monoxide CO (tpy) current	Annual Emissions (per EPA/DEQ) for CO (tpy) w/retrofit	Annual Emissions (per EPA/DEQ) for Carbon Dioxide CO2 (tpy) current	Annual Emissions (per EPA/DEQ) for CO2 (tpy) w/retrofit	Annual Fuel Base (per EPA/DEQ) Fuel2 (gal/yr)
Engine Replacement		3.165	1.372	0.076	0.025	0.032	0.016	0.587	0.473	59.9	59.9	5,400
Engine Replacement		2.954	1.28	0.071	0.024	0.03	0.015	0.548	0.441	33.33	33.3	3,000
Engine Replacement		1.139	0.499	0.03	0.007	0.028	0.01	0.166	0.114	45.5	45.5	4,100
Engine Replacement		0.444	0.226	0.03	0.003	0.028	0.005	0.186	0.053	45.5	20	1,800
Engine Replacement		2.431	1.054	0.059	0.019	0.024	0.012	0.451	0.363	17.8	17.8	1600
Engine Replacement		1.567	0.686	0.041	0.01	0.038	0.014	0.256	0.157	38.9	38.9	5000
Total Emissions (tpy)		11.7	5.117	0.307	0.088	0.18	0.072	2.194	1.601	240.93	215.4	20,900
Emissions Reduction (tpy)		6.583		0.219		0.108		0.593		25.53		

NOTE Diesel Emissions Quantifier does not process engine models below 1973. The fish tug "Hope", "Twin Disc", and "AVA June" are earlier based models. Emissions estimates are based on 1973 models in DEQ program.

Performance Measures		
Activity	Outputs	Outcomes
Repower 6 fishing tugs	6 engine repowers	6.583 TPY reduction of NOX

		0.219 TPY reduction of PM2.5 0.108 TPY reduction HC 0.593 TPY reduction in CO 25.53 TPY reduction in CO2

Section 7 Programmatic Capability and Past Performance

A. PAST PERFORMANCE

[redacted]

B. REPORTING REQUIRMENTS

The Red Cliff Environmental Department has received annual funding from EPA to carry out environmental activities on the reservation. The Department has completed the made progress toward achieving the expected results under each agreement's work plan and has developed Quality Assurance Protection Plans for work completed. Technical reports have been submitted timely to the Project Officer.

C. ORGANIZATIONAL EXPERIENCE

The TNR Division currently has 43 separate program budgets from a variety of state and federal programs with $4.1 million budgeted to support Division activities. Core leadership staff in the Division have extensive experience in contracting, including Request for Bids, bid selection, contracting project activities, and ensuring contractor compliance with intent of the grant-funded activity. Since the success of this project will involve contracting for the services of a marine engineer and for the engine repower with a marina/boat yard, the Division is well-equipped to successfully achieve the project objectives. The Division has also previously contracted with a marine engineer for research boat upgrade and replacement considerations.

D. STAFF AND RESOURCES

The TNR Division has 22 FTE. It is supported through various facets of the tribal government which include Human Resources, Accounting, Property & Procurement, and Legal.

Section 8 Budget Narrative and Detail

A. EXPENDITURE OF AWARDED GRANT FUNDS

The Tribe's Financial Policies and Procedures Manual, revised July 2001, and approved by the Red Cliff Tribal Council on September 3, 2001 establishes standardized financial policies and procedures for the Tribe; provides guidelines for the proper financial management of business affairs to make certain that its programs are properly administered; ensures fiscal accountability in accordance with generally accepted accounting principles; ensures

Red Cliff Tribal Council and the funding agencies that an adequate accounting system and effective system of internal controls are operating effectively and that complete and accurate records are being maintained and resources are controlled and expended in accordance with laws, regulations and policies and within budget limitations as specified in the approved budget. The Tribe as a whole has had 3 consecutive years with zero audit findings with a FY15 operating budget of $38 million.

B. BUDGET NARRATIVE

Personnel: [redacted]

POSITION	WAGE	Hours	SALARY	HEALTH	FICA	MED	RET	SUTA	WRK	Total Fringe
Project Coordinator	22	2600	57200	0	3546	829	0	2688	1716	8780
Division Administrator	36.72	346	12705	3400	788	184	381	597	381	5731
TOTAL			69905	3400	4334	1014	381	3286	2097	14511

[redacted]

Supplies: Anticipated supplies for the project include a work station for the Project Coordinator (desk, chair and laptop) as well as necessary paper, toner, and miscellaneous supplies. Supplies are being committed as cost-share in the estimated amount of $2,000.

Contractual: Two phases of contractual work are needed to meet project objectives. The first is to contract the services of a marine engineer to investigate each boat and determine the appropriate repower based on the existing propulsion system's gear ratio, propeller and shaft. The marine engineer may also need to design engine mounts and other features to fit the new engine in order to prepare the bid packets for the repower work. The TNR Division has contracted this type of services in the past and expects this cost to be approximately $2,000/boat. In fact, the marine engineer services has already been completed for the research boat "Hope", thus only the 5 vessels @ $2,000/vessel still require this phase of contractual for the project to move forward. The cost to satisfy this objective will be provided as match by the participating boat owners, and a letter of commitment is included in the proposal packet from each of the commercial fishermen pledging cost-share. The second contract phase will be soliciting bids for the repower work outlined in the bid packet that will be completed in the first phase of contractual, by the marine engineer. We are estimating a cost of $90,000 to repower the propulsion system of each boat; $49,000 of which will be covered by the Tribe through a BIA 638 contract for the research boat as cost-share. The entire EPA portion (75% of overall project cost) will be utilized for the repower contract completed by a marina or ship yard in the amount of $491,000.

Indirect Charges: No IDC is being requested from EPA as the request to the agency is entirely contractual expense, not subject to IDC. [redacted]

Other: Facilities Management (FM) is a tribal surcharge charged to all programs. A cost allocation plan is completed annually an approved by the Tribal Council to determine the FM rate. Contractual is not subject to FM per the cost allocation plan. [redacted]

C. BUDGET TABLE

Item	EPA	Tribe	Fishers	Total

Personnel				
[redacted]		[redacted]		[redacted]
[redacted]		[redacted]		[redacted]
[redacted]				
[redacted]		[redacted]		[redacted]
[redacted]		[redacted]		[redacted]
Supplies				
Office Supplies *laptop, work station, misc. materials*		$2,000		$2,000
Contractual				
Marine Engineer *$2,000/boat for 5 boats*			$10,000	$10,000
Licensed, Bonded Marine Diesel Contractor *$90,000/boat = $540,000 total*	$491,000	$49,000		$540,000
Tribal Indirect and Surcharges				
[redacted]		[redacted]		[redacted]
[redacted]		[redacted]		[redacted]
TOTAL COSTS	**$491,000**	**$153,356**	**$10,000**	**$654,356**
EPA Portion	75.0%			

Section 9 Applicant Fleet Description (See Attachments)